

# MATERIAL SAFETY DATA SHEET



## LIQUID CARBONIC

INDUSTRIAL/MEDICAL CORPORATION

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Compressed Air

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### SECTION I--PRODUCT IDENTIFICATION

CHEMICAL NAME: Air  
COMMON NAME AND SYNONYMS: Air, Compressed Air  
CHEMICAL FAMILY: Atmospheric Gases  
FORMULA: 78% Nitrogen 21% Oxygen Argon & Misc. Gases 1%

### SECTION II--HAZARDOUS INGREDIENTS

MATERIAL	VOLUME %	CAS NO.	1985-6 ACGIH TLV UNITS
Nitrogen	78%	7727-37-9	None Established
Oxygen	21%	7782-44-7	None Established
Miscellaneous Gases	1%	N/A	None Established
Air (Compressed)	100%	25635-88-5	None Established

### SECTION III--PHYSICAL DATA

BOILING POINT (°F.)	-317.9	SPECIFIC GRAVITY (H <sub>2</sub> O=1)	0.876 @ B. P.
VAPOR PRESSURE (mmHg.)	760	% VOLATILE BY VOLUME	Gas
VAPOR DENSITY (AIR=1)	1.0	EVAPORATION RATE (BUTYL ACETATE=1)	N/A
SOLUBILITY IN WATER @79°F	0.20 Vol Air/ Vol H <sub>2</sub> O		
APPEARANCE AND ODOR	Colorless and odorless gas		

### SECTION IV--FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) N/A FLAMMABLE LIMITS LEL N/A UEL N/A  
EXTINGUISHING MEDIA: Non-Flammable  
SPECIAL FIRE FIGHTING PROCEDURES: Keep cylinders cool with water spray.  
Remove cylinders from fire exposure if possible. Cylinders may violently explode if safety pressure relief devices should fail to relieve pressure.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: Compressed air will accelerate the burning of materials versus burning at atmospheric pressure.

### SECTION V--HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: N/A  
EFFECTS OF OVEREXPOSURE: Air is non-toxic and necessary to support life. Inhalation of air in high pressure environment such as underwater diving, caissons, or hyperbaric chambers can result in symptoms similar to over-exposure to pure oxygen. These include tingling of fingers, impaired coordination, and confusion. Decompression sickness pains (bends) are possible following rapid decompression.

EMERGENCY AND FIRST AID PROCEDURES: Decompression equipment may be required if exposed to high pressure environment.

ROUTE(S) OF ENTRY: INHALATION? Yes SKIN? INGESTION?  
CARCINOGENICITY: NTP? No IARC MONOGRAPHS? No OSHA? No

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#### SECTION VI--REACTIVITY DATA

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STABILITY: UNSTABLE ( ) STABLE (X)

CONDITIONS TO AVOID: Avoid use of oil in high pressure cylinders

INCOMPATABILITY (MATERIALS TO AVOID): N/A

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

HAZARDOUS POLYMERIZATION: MAY OCCUR ( ) WON'T OCCUR (X)

CONDITIONS TO AVOID: N/A

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#### SECTION VII--SPILL OR LEAK PROCEDURES

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Air will support combustion so it should be diverted from flammable materials to stop burning.

WASTE DISPOSAL METHOD: None required - Vent to atmosphere

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#### SECTION VIII--SPECIAL PROTECTION INFORMATION

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RESPIRATORY PROTECTION: N/A

VENTILATION: LOCAL EXHAUST N/A  
MECHANICAL (GENERAL) N/A

PROTECTIVE GLOVES: Leather EYE PROTECTION: Goggles or safety glasses

OTHER PROTECTIVE EQUIPMENT: Safety shoes

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#### SECTION IX--SPECIAL PRECAUTIONS

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Protect cylinder against physical damage. Store cylinders in a dry, cool, ventilated area. Do not allow cylinder temperature to exceed 130°F. Do not store near flammable or toxic gases. Cylinders should be stored upright and secured to prevent falling over. Keep oil and grease away.

OTHER PRECAUTIONS: Use only DOT or ASME Coded Containers. See CGA pamphlet P-1 "Safe Handling of Compressed Gases in Containers." Use a check valve or trap in discharge line to prevent backflow. Cylinders must not be recharged except by or with consent of Liquid Carbonic.

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